

Response
Serial No. 09/450,054
Page 2

Amendments to the Claims

Please amend claims 1 and 7 as follows:

1. (Currently Amended) A network for distributing a power signal in an optoelectronic circuit, said network comprising:

a plurality of electrically conductive pathways forming at least a first level wherein each level is comprised of a plurality of segments linearly extending from a common point, each of the segments of respective levels having equal lengths, and wherein the segments of a next order higher level are formed at the extremities of a previous order lower level, the extremities of the previous order lower level functioning as the common point for the formation of the next order higher level;

means for coupling said power signal from a primary input to [a] the common point at the center of the first level; and

terminal nodes coupled at the extremities of a last level for supplying said power signal to a plurality of devices that form at least a portion of said optoelectronic circuit, wherein the number of segments connecting said primary input to each of said terminal nodes is equal such that the power supplied by the terminal nodes to each of the plurality of devices is substantially equal.

2. (Previously Presented) The network of claim 1 wherein each level is at least one H-shaped pattern comprising first and second parallel branches each having a respective first and second midpoint, and a third branch interconnecting said first and second midpoints, and wherein said center of said H-shaped pattern is the midpoint of said third branch.

3. (Previously Presented) The network of claim 1 wherein each level is at least on X-shaped pattern comprising first and second branches each having a respective first and second midpoint and interconnecting said first and second

Response
Serial No. 09/450,054
Page 3

branches at said midpoints, and wherein said center of said X-shaped pattern is the intersection of said first and second branches.

4. (Previously Presented) The network of claim 1 wherein said network is located on an optoelectronic chip.

5. (Previously Presented) The network of claim 1 wherein said terminal nodes are optoelectronic devices.

6. (Previously Presented) The network of claim 1 wherein said terminal nodes are VCSELS

7. (Currently Amended) A network for distributing a power signal in an optoelectronic circuit, said network comprising:

a plurality of separate electrically conductive pathways forming at least a first level, wherein each level is comprised of a plurality of segments linearly extending from a common point, each of the segments of respective levels having equal lengths and wherein said pathways are joined only at the extremities of a previous order lower level, the extremities of the previous order lower level functioning as the common point;

means for coupling said power signal from a primary input to [a] the common point at the center of the first level;

terminal nodes coupled at the extremities of a last level for supplying said power signal to a plurality of devices that form at least a portion of said optoelectronic circuit, wherein the number of segments connecting said primary input to each of said terminal nodes is equal such that the power supplied by the terminal nodes to each of the plurality of devices is substantially equal.

8. (Previously Presented) The network of claim 7 wherein each level is at

Response
Serial No. 09/450,054
Page 4

least one H-shaped pattern comprising first and second parallel branches each having a respective first and second midpoint, and a third branch interconnecting said first and second midpoints, and wherein said center of said H-shaped pattern is the midpoint of said third branch.

9. (Previously Presented) The network of claim 7 wherein each level is at least one X-shaped pattern comprising first and second branches each having a respective first and second midpoint and interconnecting said first and second branches at said midpoints, and wherein said center of said X-shaped pattern is the intersection of said first and second branches.

10. (Previously Presented) A method of distributing a power signal to a plurality of terminal nodes on an optoelectronic circuit, the method comprising the steps of:

receiving the power signal from a primary input; and

directing said power signal to said plurality of terminal nodes using an H-tree network, said H-tree network including at least a first level, wherein the first level is coupled to said primary input, and a last level includes said plurality of terminal nodes for supplying said power signal to a plurality of devices, each of said at least one level having a plurality of segments, each segment of a respective plurality is equal in length; and

wherein a number of segments from said primary input to each of said terminal nodes is equal such that the power supplied by each of the terminal nodes to each of the plurality of devices is substantially equal.

11. (Previously Presented) The method of claim 10, wherein the directing step further includes directing said power signal to said plurality of terminal nodes using an H-tree network,

wherein said plurality of segments are configured into at least one H pattern to form said at least first level; and

Response
Serial No. 09/450,054
Page 5

wherein said at least first level is configured into a hierarchical
succession of H patterns.